

BEFORE THE ARIZONA CORPORATION

CARL J. KUNASEK CHAIRMAN JIM IRVIN

COMMISSIONER

BILL MUNDELL

COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH SECTION 271 OF THE TELECOMMUNICATIONS ACT OF 1996. AZ OCHP CON HASION

Jun 22 | 51 FM 199

DOCUMENT COMPROL

Docket No. T-00000B-97-0238

Arizona Corporation Commission
DOCKETED

JUN 2 2 1999

RUCO'S RESPONSE TO THE JUNE 8, 199 PROGEDURAL ORDER

1. What are the current national standards for OSS?

While some standards for OSS have been adopted in industry forums, each large ILEC appears to have developed its own approach to OSS.

2. <u>For areas in which no national standards exist, when are national standards anticipated?</u>

RUCO has no specific information pertinent to this question.

3. What are the current FCC guidelines for OSS?

The FCC has not issued any single order that sets forth comprehensive guidelines concerning the manner in which ILECs must provide CLECs access to their OSS relative to wholesale services, in large part because it has been a continuously evolving process. Instead, the Commission and parties in the instant proceeding must look to the FCC's findings

1 2

3 4

5

6

7 8

9

10 11

12

13

1415

16

17

18

19 20

21

2223

24

25

26

27

28

24

concerning OSS made in the *Local Competition First Report and Order*,¹ and in each successive Section 271 review that it has undertaken. To date, the FCC has issued six decisions addressing Bell operating company (BOC) applications for interLATA services authority pursuant to Section 271.² In addition, in response to a Senate inquiry concerning how the FCC was undertaking its review of Section 271 applications, on March 20, 1998, the

¹Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15509 (1996) (Local Competition First Report and Order) [subsequent case history omitted].

²The six decisions are as follows: Application by SBC Communications Inc. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services In Oklahoma, Memorandum Opinion and Order, 12 FCC Rcd 8685 (1997) (SBC Oklahoma Order); Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services In Michigan, Memorandum Opinion and Order, 12 FCC Rcd 20543 (1997) (Ameritech Michigan Termination Order); Application of BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services In South Carolina, Memorandum Opinion and Order, 13 FCC Rcd 539 (1997) (BellSouth South Carolina Order); Application by BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-region, InterLATA Services In Louisiana, Memorandum Opinion and Order, 13 FCC Rcd 6245 (1998) (First BellSouth Louisiana Order); Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services In Michigan, Memorandum Opinion and Order, 13 FCC Rcd __ (1998) (Second Ameritech Michigan Order); Application by BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide Inregion, InterLATA Services In Louisiana, Memorandum Opinion and Order, 13 FCC Rcd ___ (1998) (Second BellSouth Louisiana Order).

FCC published a letter and attachments that set forth the Common Carrier Bureau's understanding at that time of the requirements for a showing of BOC compliance with the Section 271 fourteen-point checklist. Attachment A to these Comments provides the Bureau Staff's analysis of requirements for checklist item No. 2, Access to Unbundled Network Elements, which in part describes the Bureau's working standards for compliant OSS (*op. cit...*, pages ii-1 to ii-3). RUCO believes that the FCC generally will proceed in a manner consistent with that statement of OSS guidelines when it evaluates US West's pending Section 271 application for Arizona.

However, the FCC's most recent decision concerning a Bell operating company (BOC) application for Section 271 authority provides some additional guidance concerning OSS compliance that is not reflected in the FCC's earlier letter to the Senate. In October 1998, the FCC rejected BellSouth's second application for Section 271 authority in Louisiana.³ Among other incremental refinements introduced in that decision, the FCC first emphasized the role that statistical analysis can play in demonstrating that variations in the quality of OSS access provided to CLECs vs. a BOC's own retail operations are not discriminatory.⁴ Second, in that decision, the FCC places significant weight on comparisons of the electronic flow-through rates for retail vs. wholesale service orders.⁵ As the FCC explained in that decision:

³Second BellSouth Louisiana Order.

⁴*Id.*, at para. 93.

⁵Wholesale order "flow-through" refers to the ability of CLEC orders to be transmitted through the interface with the BOC's ordering systems and processed by the BOC's various OSS on an electronic basis, without encountering error conditions that require manual intervention. *Id.*, at para. 107.

We give substantial consideration to order flow-through rates because we believe that they demonstrate whether a BOC is able to process competing carriers' orders, at reasonably foreseeable commercial volumes, in a nondiscriminatory manner. Evidence of flow-through also serves as a clear and effective indicator of other significant problems that underlie a determination of whether a BOC is providing nondiscriminatory access to its operations support systems.⁶

Third, the second Louisiana decision provides further detail concerning how the performance of OSS relative to service provisioning should be evaluated. In earlier decisions, the FCC determined that a fundamental measure for the assessment of provisioning performance was to compare wholesale vs. retail average installation intervals, measured from the receipt date for the service order to the date of service turn-on. In the second Louisiana decision, the FCC concluded that the analysis of provisioning should take into account three distinct, successive time intervals, namely the Firm Order Confirmation (FOC) interval, the Average Installation Interval, and the Completion Notice Interval. For wholesale orders, the FOC interval is the span of time between the receipt of a valid CLEC order by the BOC and the return of a FOC notice to the CLEC, which occurs as soon as the order clears the BOC's ordering OSS. The Average Installation Interval begins at that time and ends when the service has been installed. The Completion Notice Interval measures the time between the service installation and when the CLEC receives notification that its order has been completed. The

⁶Id., at para. 108 (footnote omitted).

⁷Second Ameritech Michigan Order para. 166; BellSouth South Carolina Order, at para. 137.

⁸Second BellSouth Louisiana Order, at para. 127.

FCC explains in that decision why this detail is necessary to thoroughly evaluate provisioning performance:

From the customer's perspective, a service is provided when it is installed for the customer's use. Thus, we obtain a more complete representation of BellSouth's provision of service to a competing carrier's customer by adding the first two measurements. A competing carrier, on the other hand, needs to know when it should begin billing the customer for the service. From the competing carrier's perspective, therefore, we obtain a more complete representation of BellSouth's provision of service by adding all three measurements.⁹

Finally, the Commission should take note of the important role that data concerning the BOC's retail service-related OSS performance has played in the FCC's evaluations of the OSS access afforded to new entrants. Because the BOC's retail performance serves as the benchmark by which its wholesale performance of OSS functions can be evaluated, the FCC has found on numerous occasions that its evaluations of previous Section 271 applications have been hampered by BOCs' failure to provide adequate data concerning their retail performance.¹⁰

4. What are other standards this Commission should consider in evaluating whether US WEST OSS complies with §271?

In contrast to most state regulatory commissions (including this Commission), the FCC has had the opportunity to evaluate several BOC applications for Section 271 authority and, thus, has already devoted substantial resources and effort to considering how best to assess a

⁹*Id.*, at para. 127.

¹⁰For example, see *Ameritech Michigan Order*, at para. 166; SBC *Oklahoma Order*, at para. 118; Second *Ameritech Michigan Order*, at paras. 166-167; and *Second BellSouth Louisiana Order*, at para. 123.

BOC's claims for checklist compliance. Based on that experience, the FCC has developed a multitude of specific evidentiary standards for compliance with most items on the checklist, including access to OSS, which have been articulated in its successive decisions addressing those BOC applications (see RUCO response to Question 3 above). By taking this prior work into account, the Commission can optimize the focus of its investigation and ensure that the evidence that it weighs will be relevant to the determinations that the FCC must make in order to judge U S West's pending federal application for Section 271 authorization.

In addition, however, some state-level evaluations of Section 271 compliance have produced useful guidelines in areas that the FCC has not fully articulated to date. For example, the Staff of the California Public Utilities Commission (CPUC) presented guidelines concerning OSS testing.¹¹ that can be adapted to this proceeding as follows:

- (1) Testing should be conducted by a third party, independent of the BOC and CLECs, and with demonstrated expertise in relevant areas;
- (2) The tests' scope and methods should be developed collaboratively, with participation by CLECs as well as the BOC, and performed according to a well-documented plan;
- (3) Tests should reflect realistic forecasts of demand volumes and mix of order types, taking into account CLEC projections as well as the BOC's views;
- (4) The methods, analysis, and results, including the raw data, should be made available to all interested parties.

RUCO recommends that the Commission, at a minimum, apply these guidelines to the testing of US West's OSS supporting wholesale services.

¹¹Re: Pacific Bell (U 1001 C) and Pacific Bell Communications Notice of Intent to File Section 271

Application for InterLATA Authority in California, CPUC Final Staff Report, October 5, 1998, at 53-57.

5. <u>Has an OSS or any portion of OSS, been approved by the FCC? If so, please provide specifics.</u>

RUCO is not aware of any finding by the FCC to date in which it approved, in the context of a Section 271 application, a BOC's arrangements for CLEC access to its OSS for the purposes of supporting wholesale services. In each of the four orders in which it has reached the question of OSS compliance, (Ameritech-Michigan, BellSouth-South Carolina, BellSouth-Louisiana (twice)¹³) the FCC has found serious deficiencies in this area. In particular, the FCC has repeatedly determined that applicant BOCs have not demonstrated

¹³The FCC found that similar deficiencies in the OSS compliance reflected in evidence submitted by BellSouth in its South Carolina and first Louisiana applications:

We find in this proceeding, as we did in the *BellSouth South Carolina Order*, that BellSouth's operations support systems fail to offer nondiscriminatory access to OSS functions for the pre-ordering, ordering, and provisioning of resale services. During the 37-day interval between the two applications, BellSouth continued to improve its operations support systems. We commend BellSouth for these efforts. We agree with the Department of Justice and the majority of commenters, however, that the marginal improvements that BellSouth made during this short time do not address the major deficiencies of BellSouth's operations support systems, *i.e.*, that competing carriers do not have access to the basic functionalities at parity with BellSouth's own retail operations. We identified these same deficiencies in the *BellSouth South Carolina Order*. BellSouth's deficiencies with respect to its operational support systems preclude competing carriers from being able to compete fairly with BellSouth and render it noncompliant with the competitive checklist." *First BellSouth Louisiana Order* at para, 22.

¹²The FCC did not consider OSS compliance in its review of SBC's Section 271 Application for Oklahoma because it rejected the application based on threshold deficiencies in the BOC's "Track A" compliance. *SBC Oklahoma Order* at para. 66.

that they are providing CLECs with access to their OSS on a nondiscriminatory basis. This Commission should recognize, however, that the FCC's approach to the evaluation of OSS reflects the fact that the applicant has the burden of proof to demonstrate that its OSS are compliant with the conditions set forth in the Section 217 checklist. Consequently, the FCC's decisions on Section 271 compliance focus on the deficiencies that it has identified in a BOC's OSS arrangements, and typically do not elaborate on those dimensions of OSS-related performance which might have been deemed to be compliant.¹⁴

6. What type of collaborative process do you recommend to enable the parties to reach agreement on an acceptable OSS?

The concept of a collaborative process, bringing together U S West, CLECs, and other interested parties, is an appealing approach. As the Commission is undoubtedly aware, collaborative working groups have been used in some other states to address OSS compliance. For example, the Texas PUC established an OSS collaborative process as one step to expedite approval of SBC's application for Section 271 authority in Texas. The Texas working group has been developing a comprehensive set of performance measures to monitor and evaluate the OSS interface and internal capabilities relied upon by CLECs. The New York PSC (NYPSC) has also relied upon this type of informal working group, which expanded the NYPSC's existing service quality monitoring process to encompass inter-carrier services that

¹⁴For example, see the *BellSouth South Carolina Order*, at para. 88.

¹⁵Texas PUC Project No. 16251, Order No. 25, Adopting Staff Recommendations: Directing Staff to Establish Collaborative Process (June 1, 1998), at 1.

CLECs purchase from BA-NY in order to provide competitive local exchange service.¹⁶ Recently, the Public Utilities Commission of Ohio accepted a stipulation in its SBC-Ameritech merger review proceeding, which included as a condition of the merger the formation of two OSS collaborative processes in that state as well. In Ohio, the first working group will investigate the integration of SBC and Ameritech's OSS; the second will focus on the implementation of at least 105 of the Texas OSS and facilities performance measures.¹⁷

However, past experience has revealed some potential pitfalls of informal working groups. First, the incumbent LEC often has far more resources (primarily in the form of dedicated personnel) to devote to technical negotiations undertaken pursuant to a regulatory mandate, which puts it in a position to dominate the working group. This has been a common experience in industry forums dealing with such issues as numbering, billing, and open network architecture. Second, it may be difficult to reach consensus when the interests of the participants diverge significantly. If, for example, the consensus appears to be going in a direction with which the ILEC does not agree, it can use various tactics to derail or delay the process. Thus, to be successful, the collaborative process should have (1) well-defined objectives, (2) a mechanism for staying on schedule (e.g., target dates for intermediate work products), and (3) an objective moderator, who can identify areas of consensus and help to prevent any party from dominating the process unfairly.

Again, the experience in other states may be instructive. In California, the CPUC Staff identified the three primary goals for that state's collaborative process: (1) to develop solutions for identified problem areas, (2) to establish implementation goals, and (3) to provide

¹⁶New York PSC, Case 97-C-0139, Order Adopting Inter-Carrier Service Quality Guidelines, February 16, 1999 (mimeo), pages 6-8.

¹⁷PUC of Ohio, Case No. 98-1082-TP-AMT, Opinion and Order (April 8, 1999), at 10.

safeguards (e.g., penalties and assurance mechanisms) to ensure that corrective measures will not deteriorate over time.¹⁸ In Ohio, a distinguishing feature of the collaborative proposal included in the SBC/Ameritech merger settlement is the inclusion of sanctions for failure to implement performance measures within a specified period of time.¹⁹ The imposition of sanctions for non-performance should be considered in the collaborative process.

7. What information is necessary to enable you to determine whether US West's OSS is acceptable?

A comprehensive assessment of US West's OSS for determination of compliance with the requirements of Section 271 will require a broad range of information, reflecting the myriad ways in which OSS are used in the provision of wholesale services. The types of information required can be best thought of in terms of a matrix, with the following dimensions:

- (1) each type of wholesale service US West must make available (i.e., resold residence exchange service, resold business exchange service non-designed, resold business exchange service designed, etc.; unbundled loops, local switching, dedicated transport, shared transport; UNE combinations, etc.);
- (2) the various functions served by OSS (i.e., pre-ordering, ordering, provisioning, maintenance and repair, billing, etc.);

¹⁸California PUC, Order Instituting Rulemaking and Investigation on the Commission's Own Motion into Competition for Local Exchange Service (and related dockets), Decision 98-12-069, December 17, 1998, at ___.

¹⁹SBC/Ameritech is obligated to implement at least 79 of those measures within 270 days of the merger closing (or April 1, 2000, whichever is later), or it must pay \$17.5-million to CLECs active in its Ohio service territory (plus an additional \$2.5-million to a technology fund). *Id.* at 10.

- (3) each of the electronic gateways and manual ordering procedures that US West have devised as CLEC interfaces to its OSS; and
- (4) the alternative types of evidence that the Company can present to support its application (i.e., descriptive written documentation, actual performance results, third-party tests, etc.).

Within that spectrum of information, the following is a listing of some of the more important types of data that will be required in order for RUCO to make a reasonable judgement concerning the adequacy of US West's OSS arrangements for wholesale services:

- (a) Ordering volumes and units in service for each wholesale service type, on a monthly basis, for the past six months.
- (b) Rates for fully-electronic order acceptance ("flow-through") versus ordering errors/rejections ("fall-out"), by wholesale service type, on a monthly basis, for the past six months. Parallel data must be provided for comparable retail services as well in order to demonstrate nondiscrimination.
- (c) Average intervals for each phase of the ordering/provisioning process, by wholesale service type, including: FOCs, Installations, Completion Notices, Jeopardy Notices, etc. Data should be disaggregated on a monthly basis, for the past six months. Parallel data must be provided for comparable retail services as well in order to demonstrate nondiscrimination.
- (d) Average intervals for billing information transmitted to CLECs, including: the average time to provide usage records, average time to deliver invoices, etc. Like the other data discussed above, this information should be presented on a monthly basis for a six-month span, with comparative data for US West's retail services also supplied to demonstrate nondiscrimination.

- (e) Performance data for the quality of US West's wholesale services, including (for each wholesale service type): Installation commitments met; Service installation intervals; Rate of service installation trouble reports; Out of service cleared within 24 hours; Mean time to restore; Trouble report rates; Rate of repeat trouble reports. Like the other data discussed above, this information should be presented on a monthly basis for a six-month span, with comparative data for US West's retail services also supplied to demonstrate nondiscrimination.
- (f) For each performance measurement supplied, US West should provide complete documentation of how the measures are conducted, including sampling procedures and measurement definitions.
- (g) For each performance measurement supplied, US West should make available to the Commission and interested parties the entire sample set (i.e., the raw data, masked as necessary to avoid revealing competitively-sensitive information concerning individual CLECs), plus statistical analyses demonstrating that any observed variations in the average intervals identified in parts (a) and (b) for wholesale vs. retail services are not evidence of discriminatory treatment.
- (h) Whenever performance data based on actual commercial usage is unavailable for particular wholesale services, OSS gateways, and/or OSS functions, US West should present the results of independent, third-party tests. (See RUCO response to question 4 concerning how such testing should be conducted.) The testing information should be parallel to that which would have been supplied for the performance measure(s) that the tests are replacing, i.e. it should include comprehensive documentation of test objectives and procedures, the raw test results, appropriate statistical analyses, and an explanation of the conclusions that can be drawn from the tests and the tests' limitations, if any.

Each of the types of information identified above are vital to support a demonstration by US West that its OSS arrangements are supporting the Company's provision of wholesale services on a nondiscriminatory basis, in compliance with the requirements of the Section 271 checklist.

8. <u>Do you agree that formal discovery should remain in place during the workshop phase of OSS? Should the discovery process be modified, if so, how?</u>

Unlimited discovery need not continue during the workshop phase. However, the Commission should provide for some additional discovery, as follows:

- (a) U S West should have an ongoing obligation to supplement its responses to discovery so that it contains current and accurate information.
- (b) If there is specific information that would enable other participants to evaluate U S West's representations in the collaborative process, U S West should be required to provide this information expeditiously.
- (c) An opportunity for further discovery should be provided following the issuance of the Staff Report, with responses due no later than two weeks prior to the date for filing of intervenor testimony.

9. What discovery items that had been incorporated into intervenors' testimony should be separated out and responded to by intervenors prior to the filing of testimony?

When full discovery is implemented after the working group is completed, then there must be sufficient time for responses to discovery before intervenor testimony is due.

10. How should the workshops be conducted to ensure maximum results in assessing US WEST's OSS? Who should participate? How many workshops do you anticipate being useful, and over what period of time?

See response to question 6. RUCO expects to monitor the collaborative process. However, due to resource constraints and recognizing that the carriers themselves are the

most technically capable of participating in this process, RUCO does not expect to provide technical information if they are highly technical in nature.

11. Should a Staff Report issue with recommendations regarding existing OSS compliance and modifications to achieve compliance? How long after the last workshop will Staff need to issue a Report?

The question appears to anticipate a Staff Report at the completion of the OSS collaborative process. If Staff is given the task of preparing such a report, it should be made clear that U S West still maintains the burden of proof to demonstrate its OSS compliance. Staff should be given a minimum of four weeks after the last workshop to complete its Report, due to the highly complex and technical nature of the information involved.

An alternative approach would be to have a Staff Report issued prior to the collaborative process, setting forth the standards for OSS compliance and the objectives of the collaborative process.

12. <u>How much time after issuance of a Staff Report will you need to respond to the Report?</u>

This depends on the length and complexity of the report, as well as whether further discovery is needed following the report's release. RUCO's best estimate at this time is that a response could be prepared within three weeks of receiving the report.

13. When will the intervenors and Staff be able to file a preliminary statement indicating whether U S WEST is in compliance with any checklist items?

RUCO would be prepared to file a preliminary statement within two weeks of receiving all outstanding discovery. However, RUCO cautions against a procedure under which the issue of U S West's compliance becomes a moving target (i.e., U S West is continually permitted to revise its filing). The Commission has ruled that U S West was to submit a complete application, only when it was prepared to do so. While U S West should not be discouraged from improving its UNE provisioning, OSS, etc., other parties are put at a considerable disadvantage if they must continually re-evaluate U S West's evidence in order to

participate meaningfully in the Section 271 review. The FCC has also recognized this problem 1 in its procedural rules for Section 271 applications.²⁰ 2 Any other relevant information that the parties desire to provide. 14. 3 While RUCO supports the Commission's decision to focus specific initial attention on 4 OSS compliance, RUCO urges the Commission not to lose sight of other important issues that 5 must be addressed in a thorough Section 271 review. 6 RESPECTFULLY SUBMITTED this 22nd day of June, 1999. 7 8 9 10 11 AN ORIGINAL AND TEN COPIES of the foregoing filed this 22nd day 12 of June, 1999 with: 13 **Docket Control Division Arizona Corporation Commission** 14 1200 West Washington Phoenix, Arizona 85007 15 COPIES of the foregoing hand delivered/ 16 mailed this 22nd day of June, 1999 to: 17 Jerry Rudibaugh, Chief Hearing Officer Hearing Division 18 **Arizona Corporation Commission** 1200 West Washington 19 Phoenix, Arizona 85007 20 21 22 23

24

Counsel

²⁰Ameritech Michigan Termination Order.

1	Ray Williamson, Acting Director
2	Utilities Division Arizona Corporation Commission 1200 West Washington Phoenix, Arizona 85007
3	
4	Maureen A. Scott, Attorney Legal Division
5	Arizona Corporation Commission
6	1200 West Washington Phoenix, Arizona 85007
7	Thomas M. Dethlef U S West Communications, Inc.
8	1801 California Street #5100 Denver, Colorado 80202
9	
10	Maureen Arnold U S West Communications, Inc.
11	3033 North Third Street, Room 1010 Phoenix, Arizona 85012
12	Michael M. Grant Gallagher and Kennedy
13	2600 North Central Avenue Phoenix, Arizona 85004-3020
14	
15	Timothy Berg Fennemore Craig 3003 North Central Avenue, Suite 2600
16	Phoenix, Arizona 85016
17	Mark Dioguardi Tiffany and Bosco, P.A.
18	500 Dial Tower 1850 North Central Avenue
19	Phoenix, Arizona 85004
20	Thomas L. Mumaw Snell & Wilmer
21	One Arizona Center
22	Phoenix, Arizona 85004-0001

1	Robert Munoz
2	Worldcom, Inc. 185 Berry Street, Bldg #1, #5100 San Francisco, California 94107
3	
4	Donald A. Low Sprint Communications Co. L.P. 8140 Ward Parkway SE
5	Kansas City, Missouri 64114
6	Deborah S. Waldbaum Teleport Communications Group, Inc.
7	201 North Civic Drive, Suite 210 Walnut Creek, California 94596
8	,
9	Carrington Phillips Cox Communications 1400 Lake Hearn Drive, N.E.
10	Atlanta, Georgia 30319
11	Thomas H. Campbell
12	Lewis & Roca 40 North Central Avenue Phoenix, Arizona 85004
13	·
14	Bill Haas Richard Lipman McLeod USA
15	6400 C Street, SW Cedar Rapids, Iowa 54206-3177
16	
17	Richard Smith Cox California Telecom, Inc. 529 Jack London Square
18	Oakland, California 94697
19	Richard M. Rindler Morton J. Posner
20	Swidler & Berlin Shereff Friedman, LLF
21	3000 K Street, N.W., Suite 300 Washington, DC 20007
22	

1	Lex J. Smith
	Michael W. Patten
2	Brown & Bain 2901 North Central Avenue
3	P.O. Box 400
٦	Phoenix, Arizona 85004-0400
4	
_	Charles Kallenbach
5	American Communications Services, Inc.
6	131 National Business Parkway Annapolis Junction, Maryland 20701
١	Tamapono dariodori, maryiana 2070 i
7	Karen L. Clauson
	Thomas F. Dixon
8	MCI Telecommunications Corp. 707 17 th Street #3900
9	Denver, Colorado 80202
}	2
10	Kath Thomas
11	Brooks Fiber Communications 1600 S. Amphlett Blvd #330
''	San Mateo, California 94402
12	·
.	Richard S. Wolters
13	AT&T & TCG 1875 Lawrence Street, Suite 1575
14	Denver, Colorado 80202
	,
15	Joyce Hundley
16	United States Department of Justice Antitrust Division
	1401 H Street NW, Suite 8000
17	Washington, DC 20530
40	La dia Dividea
18	Joan Burke Osborn Maledon
19	2929 North Central Avenue, 21 st Floor
	P.O. Box 36379
20	Phoenix, Arizona 85067-6379
21	Penny Bewick
	Electric Lightwave, Inc.
22	4400 NE 77 th Avenue
23	Vancouver, Washington 98662
23	
24	

1	Alaine Miller Nextlink Communications, Inc.
2	500 108 th Avenue NE, Suite 2200 Bellevue, Washington 98004
3	
4	Diane Bacon Communication Workers of America 5818 North 7 th Street, Suite 206
5	Phoenix, Arizona 85014-5811
6	Andrew O. Isar
7	Telecommunications Resellers Association 4312 92 nd Avenue NW Gig Harbor, Washington 98335
8	
9	Raymond Heyman Randall H. Warner
10	Two Arizona Center 400 North 5 th Street, Suite 1000 Phoenix, Arizona 85004-3906
11	
12	Patricia L. VanMiddle AT&T
13	2800 North Central Avenue, Suite 828 Phoenix, Arizona 85004
14	Daniel Waggoner, Esq. Davis Wright Tremaine
15	1501 Fourth Avenue, Suite 2600 Seattle, Washington 98101-1688
16	
17	David Kaufman e.spire Communications, Inc. 466 West San Francisco Street
18	Santa Fe, New Mexico 87501
19	
20	By Chery Fraulob
21	Cheryl Madiob
22	
23	
24	
	H

Attachment A

Attachment to March 20, 1998 letter from William E. Kennard, FCC Chairman, to Hon. John McCain, Chairman, Senate Committee on Commerce, Science and Transportation, and Hon. Sam Brownback, Senator.

Checklist Item (ii): Access to Unbundled Network Elements

Because specific network elements are also addressed in other checklist items, this discussion only addresses the requirements for access to all network elements. In particular, this section addresses (1) the operations support systems ("OSS") that are necessary to provide access to other network elements as well as resold services; and (2) the provision of network elements in a manner that allows competing carriers to combine such elements.

1. Access to Operations Support Systems

Background

- Section 271(c)(2)(B)(ii) of the Act requires a section 271 applicant to offer "nondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)."
- Section 251(c)(3) of the Act requires BOCs to provide access to network elements pursuant to "conditions that are just, reasonable, and nondiscriminatory "
- Section 252(d)(1) of the Act states that "[d]eterminations by a State commission of the just and reasonable rate for . . . network elements for purposes of [section 251(c)(3)] . . . (A) shall be (i) based on the cost . . . of providing the . . . network element . . . and (ii) nondiscriminatory, and (B) may include a reasonable profit."

Checklist Discussion

- The Commission identified the following network elements, which must be provided on a nondiscriminatory basis pursuant to section 251(c)(3):
 - local loops;
 - network interface devices;
 - local switching;
 - interoffice transmission facilities;
 - signaling networks and call-related databases;
 - operations support systems; and
 - operator services and directory assistance.

See 47 C.F.R. § 51.319; Local Competition First Report and Order at ¶ 516. The Eighth Circuit Court of Appeals upheld this finding. Iowa Utils. Bd., 120 F.3d at 808-09.

- The Commission has set forth specific requirements for access to network elements, including, among other things, that timeliness, quality, and accuracy be substantially the same as the BOC provides to itself. See generally 47 C.F.R. § 51.311 and 51.313.
 - The term "operations support systems," or OSS, refers to the computer systems, databases, and personnel that incumbent carriers rely upon to discharge many internal functions necessary to provide service to their customers. A competing carrier must obtain access to the same OSS functions (that is, functions provided by the relevant databases, computer systems, and personnel) in order to sign up customers, place an order for services or facilities with the incumbent, track the progress of that order to completion, receive relevant billing information from the incumbent, and obtain prompt repair and maintenance services for its customers.
- As outlined in the *Ameritech Michigan Section 271 Order* and the *BellSouth South Carolina Section 271 Order*, the Commission undertakes a two part inquiry in evaluating whether a BOC is meeting its statutory obligation to provide competing carriers with nondiscriminatory access to OSS functions.
 - First, the BOC must demonstrate that it has deployed the necessary systems and personnel to provide competing carriers with access to each of the necessary OSS functions, and that the BOC has adequately assisted competing carriers in understanding how to implement and use all of the OSS functions available to them. Ameritech Michigan Section 271 Order at ¶ 136; BellSouth South Carolina Section 271 Order at ¶ 96.
 - A BOC must demonstrate that it has developed electronic and manual interfaces that allow competing carriers to access all of the OSS functions identified in the Local Competition First Report and Order. Ameritech Michigan Section 271 Order at ¶¶ 137-138; BellSouth South Carolina Section 271 Order at ¶ 96.
 - A BOC must also demonstrate that the interfaces used to access its OSS functions allow competing carriers to transfer the information received from the BOC to their own back office systems (e.g., a competing carrier's billing system) and among the various interfaces provided by the BOC (e.g., pre-ordering and ordering interfaces). BellSouth South Carolina Section 271 Order at ¶ 158-161.
 - The Commission has not specified particular systems or interfaces a BOC must use to demonstrate compliance with the statutory nondiscrimination requirements.

- Second, the BOC must demonstrate that the OSS functions and interfaces are operationally ready. Ameritech Michigan Section 271 Order at ¶ 136; BellSouth South Carolina Section 271 Order at ¶ 96. In addition, the BOC's deployment of OSS functions to competing carriers must be able to handle current demand as well as reasonably foreseeable demand. Ameritech Michigan Section 271 Order at ¶ 138; BellSouth South Carolina Section 271 Order at ¶ 97.
 - For those OSS functions a BOC provides to a competing carrier that are analogous to OSS functions that the BOC provides to itself, the BOC must provide access to competing carriers that is equivalent to the level of access that the BOC provides to itself in terms of quality, accuracy and timeliness (i.e., it provides OSS functions in substantially the same time and manner as it provides to itself). Local Competition First Report and Order, 11 FCC Rcd at ¶ 517; Ameritech Michigan Section 271 Order at ¶ 139, BellSouth South Carolina Section 271 Order at ¶ 98.
 - For OSS functions without a retail analog, the BOC must demonstrate that the access it provides competing carriers offers an efficient competitor a meaningful opportunity to compete. Ameritech Michigan Section 271 Order at ¶ 139; BellSouth South Carolina Section 271 Order at ¶ 98. The Commission's orders emphasize results, not the process used to achieve those results.
 - While actual commercial usage is the most probative evidence that the BOC's OSS functions are operationally ready, the Commission will also consider, carrier-to-carrier testing, independent third-party testing, and internal testing. Ameritech Michigan Section 271 Order at ¶ 138.
 - Information that compares how the BOC provides access to OSS functions to itself and to competing carriers is critical in assessing whether the BOC is providing nondiscriminatory access to such functions as required by the statute. Ameritech Michigan Section 271 Order at ¶¶ 204-213. Bureau staff, therefore, believes that a BOC can demonstrate compliance with the statutory requirements in checklist item (ii) by submitting comparative performance data, such as the period required to install a network element, how often the promised installation dates are met, how well the competing carrier is informed of the status of its order, and how responsive the BOC is in providing access to needed support functions. Ongoing reporting of these measurements will assist in ensuring that the BOC continues to meet its statutory obligations after receiving section 271 authorization.

2. Access to Combinations of Network Elements

Background

- Section 271(c)(2)(B)(ii) of the Act requires a section 271 applicant to show that it offers "[n]ondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)."
- Section 251(c)(3) provides that an incumbent LEC "shall provide such unbundled elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service."
- Section 251(c)(6) provides that an incumbent LEC has the "duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier."

 Section 251(c)(6) further provides that an incumbent LEC "may provide virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations."

Checklist Discussion

- New entrants may provide telecommunications service wholly through the use of unbundled network elements purchased from incumbent LECs. 47 C.F.R. § 51.315(a); Local Competition First Report and Order at ¶ 328-341; see also Iowa Utils. Bd. v. FCC, 120 F.3d 753, 814 (8th Cir. 1997).
- A "requesting carrier may choose any particular method of technically feasible ... access to unbundled network elements," including physical or virtual collocation. Local Competition First Report and Order at ¶ 549. Incumbent LECs must provide technically feasible methods of obtaining interconnection or access to unbundled network elements that include, but are not limited to, physical and virtual collocation at the premises of an incumbent LEC. 47 C.F.R. § 51.321.
- A requesting carrier "may achieve the capability to provide telecommunications services completely through access to the unbundled elements of an incumbent LEC's network." *Iowa Utils. Bd.*, 120 F.3d at 814. Incumbent LECs must offer network elements in a manner that allows new entrants to combine them to provide a finished telecommunications service. *Iowa Utils. Bd.*, 120 F.3d at 814.

- A BOC must offer nondiscriminatory access to network elements in a manner that allows competing carriers to combine such elements in order to satisfy section 271(c)(2)(B)(ii). 47 U.S.C. § 251(c)(3).
- While it is unclear from *Iowa Utils*. *Bd*. whether the Act requires unbundled elements to be provided on a physically separated basis, or whether the Act allows competing carriers to have physical access to the BOCs' networks in order to combine network elements without the use of physical collocation, at a minimum, Bureau staff believes that the BOC must demonstrate that at least one of the methods it offers satisfies the statutory nondiscrimination requirement. Bureau staff believes that a BOC may satisfy this requirement by, for example, providing physical or virtual collocation, direct access, mediated access, logical or electronic methods for combining network elements, or combining the elements on behalf of competing carriers for a separate charge.
- The following information would be useful in determining whether the BOC's method for allowing competing carriers to combine network elements meets the statutory nondiscrimination requirement:
 - Length of time for new entrants to obtain and combine network elements, e.g., time required to build collocation cages; loop cutover times, etc.
 - Practical availability of the BOC's selected method for providing access to network elements, including whether the BOC can meet current and reasonably foreseeable demand and has identified the specific terms and conditions for obtaining such access.